

CLAIMS

Sub B 1. A load bearing structural element extruded from a thermoplastic plastics material which is compounded so that the element has a flexural modulus of 4000 MPa or above.

2. An element as claimed in claim 1, which has a flexural modulus of 5500 MPa or above.

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3. An element as claimed in claim 1 or 2, which has a ratio of flexural modulus (in Megapascals) to density (in kg/m³) of at least 2.5:1.

15 Sb cc³ 4. An element as claimed in claim 3, wherein said ratio is at least 4.2:1.

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5. An element as claimed in any preceding claim, which comprises from 30-90 wt% of thermoplastic polymer and 25-50 wt% of an elastic modulus increasing material.

25 6. An element as claimed in any preceding claim,
wherein the thermoplastic polymer is polyethylene,
polypropylene or polyethylene terephthalate.

56cc 17. An element as claimed in claim 6, wherein the thermoplastic polymer is bi-axially oriented polypropylene.

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AC } 8. An element as claimed in any preceding claim,
wherein the thermoplastic plastics material is a
recycled material.

35 ^{out} A7 } 9. An element as claimed in any preceding claim which
contains glass fibres as an elastic modulus increasing

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} material.

Subcc2 10. An element as claimed in claim 9, wherein the glass fibres have a length of at least 5mm.

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11. An element as claimed in claim 10, wherein the glass fibres have a length of 8-12mm.

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} 12. An element as claimed in claim 9, 10 or 11, wherein the glass fibres are oriented in planes parallel to a load bearing surface thereof.

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} 13. An element as claimed in any preceding claim, which has compounded with the thermoplastic plastics material one or more substances selected from fire retardants, UV stabilisers and friction increasers.

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} 14. An element as claimed in any preceding claim which has one or more substances selected from fire retardants, UV stabilisers and friction increasers present in an outer layer which has a thickness of up to 1mm.

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} 15. An element as claimed in claim 14, wherein the outer layer is formed from thermoplastic plastics material containing said substance(s) and co-extruded with the remainder of the material forming said element.

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} 16. An element as claimed in any preceding claim, which has a co-extruded outer layer which has anti-slip character.

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} 17. An element as claimed in any preceding claim wherein the compounded thermoplastic plastics material contains a coupling agent and/or a nucleating agent in

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cont

amounts of / from 1 to 3 wt% and 0.1 to 2 wt%
respectively.

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